# EVOLUTION CTS2

## USER MANUAL

# Read Me

## Safety Warning & Caution

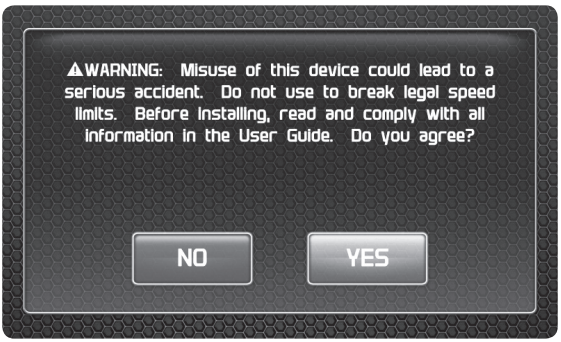
Throughout this User Manual you will see important messages regarding your safety or the protection of your vehicle. These messages are designated by the words WARNING or CAUTION.

⚠ ***WARNING indicates a condition that may cause serious injury or death to you, your passengers or others nearby. Pay careful attention to these Warning messages, and always comply with them. They could save a life.***

***CAUTION indicates a condition that could cause damage to your vehicle. It is important to install and operate your product in conformance with instructions in this Manual. Caution alerts you to particularly important things that will keep your vehicle operating properly.***

The Edge Product you have purchased is a high-performance product. As such, it does present some risks of which you should be fully aware. Do not use this product until you have carefully read the following safety information and the Owner Agreement.

***NOTE: After the display has been installed, a warning screen will appear (3) different times. If you agree with the agreement, press the [YES] button to continue.***


⚠WARNING: Misuse of this device could lead to a serious accident. Do not use to break legal speed limits. Before installing, read and comply with all information in the User Guide. Do you agree?
NO
YES

## Safety Guidelines

**1.** Do not exceed legal speed limits on public roadways. Use any enhanced speed capabilities of this product only in closed circuit, legally sanctioned racing environments expressly for this purpose. Loss of control from speeding on a public road could seriously injure you, your passengers, or others on the roadway.

**2.** Do not operate the device while driving. Perform all adjustments or changes while stopped. Changing a setting while under way can interfere with your attention to roadway conditions.

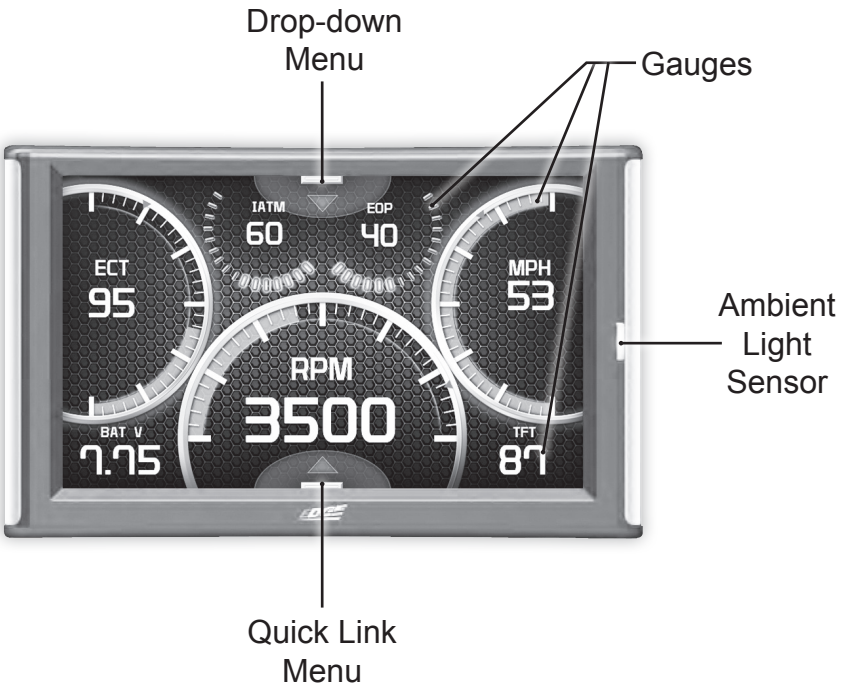
**3.** "Stacking" performance-enhancing devices or other improper installation can cause power train failure on the road. Other products may have features incompatible with your Edge device. Follow all installation and operating instructions, and do not stack products.

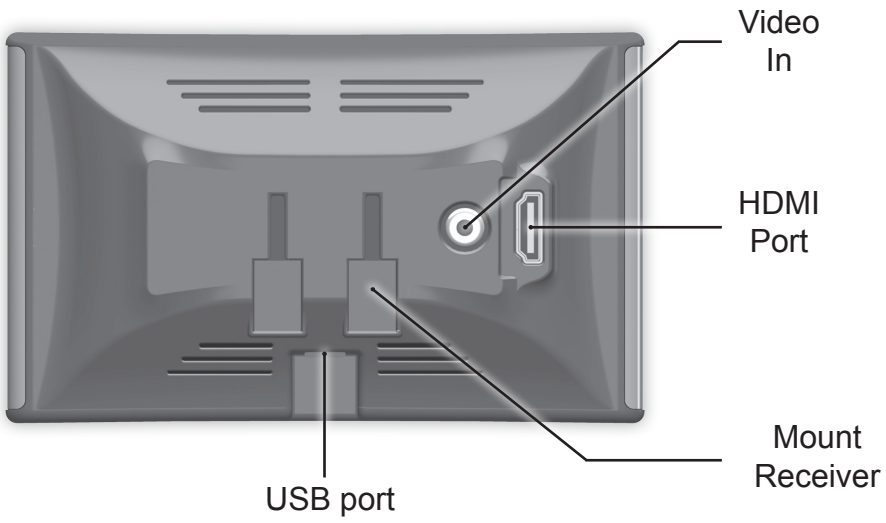
**4.** Some modifications may affect other parts of your vehicle. For example, if you remove/adjust the speed limiter in your vehicle, be sure your tires and other components are rated for the increased speeds they will have to withstand. Not doing so can lead to loss of vehicle control. Modify the speed limiter only for use in closed circuit, legally sanctioned racing environments, not for use on public roadways.

⚠ ***WARNING - Misapplication or misuse of this product could lead to a serious or fatal accident. Comply with all safety information in this manual, and your vehicle owner's manual. Follow safety, installation and operating instructions in this User Manual to assure proper use.***

# At a Glance

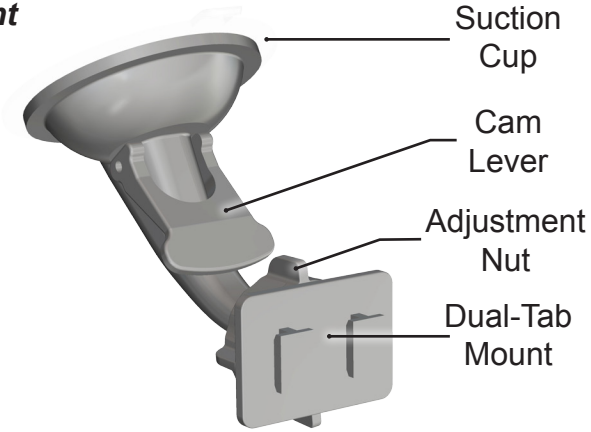
## Physical Overview - The Display



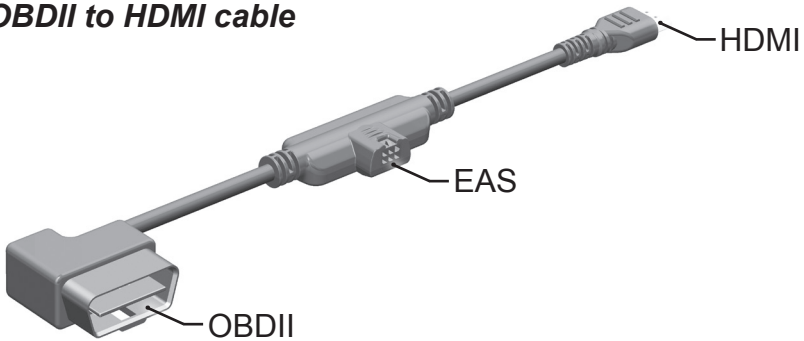
## Accessories

***Windshield Mount***

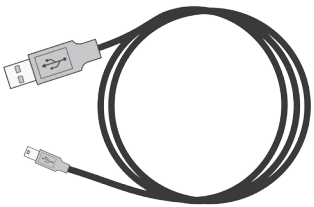



***Alcohol Wipe***

***OBDII to HDMI cable***




***Mini USB Cable***



***Zip-Ties***

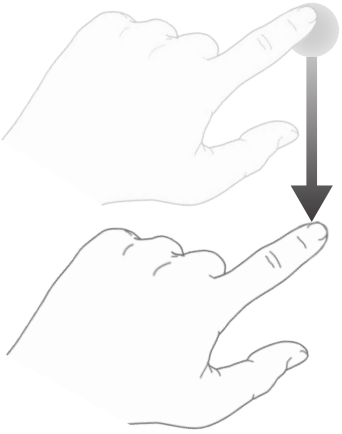
## Touch Screen Gestures

*Use these gestures to navigate and control the display.*

Press

The Press gesture is used to select options, input values, enter menus, etc.

Hold & Drag



The Hold & Drag gesture is used to drag up or down menus, and scroll through menu items.

Swipe

The Swipe gesture is used to scroll through gauge screens.

## Menu Icons

| Icon | | What it does |
|---|---|---|
| | Home | Brings you back to the home screen |
| | Background | Changes the background Image |
| | Custom Color | Opens the custom color picking menu |
| | Default Color | Opens the default color picking menu |
| | Back | Brings you back to the previous screen or menu |

## Common Terms

| Term | What it is |
|---|---|
| PID - Parameter IDs | Data taken from a vehicle & viewed in a gauge |
| DPF - Diesel Particulate Filter | Required on new diesels to filter out soot |
| EAS - Expandable Accessory System | Allows you to connect aftermarket sensors and other devices such as turbo timers |
| ECM - Engine Control Module | (aka ECU) A computer that controls various sensors and engine components |
| TCM - Transmission Control Module | (aka TCU) A computer that controls automatic transmissions |
| PCM - Power Control Module | (aka PCU) Combines and provides power for the ECM and TCM |

# Getting Started

## Download the Fusion Update Software

*A computer with internet access is required:*
**STEP 1 -** Go to **www.edgeproducts.com**
**STEP 2 -** Click the **UPDATES** tab, then **DOWNLOAD**.
**STEP 3 -** Open the **FusionClientSetup.exe** file, then click **Run**.
**STEP 4 -** Click **Next** to begin.
**STEP 5 -** Choose a folder location, then click **Next** to continue.
**STEP 6 -** Click **Next** to confirm the installation.
**STEP 7 -** Click the **OK** button if during the installation, the following message appears:

*"These drivers are not Windows Logo or WHQL verified. If you are asked, please choose to install them anyway."*

**STEP 8 -** Click **Close** to exit once the installation is complete.
**STEP 9 -** Double click the **Fusion Icon** on your desktop.
**STEP 10 -** Click on the **Create a New User** option.
**STEP 11 -** Fill in the required information and click **Save**.

*An e-mail containing your fusion password will be sent to the e-mail you used in the form. Use this password to login into Fusion. (NOTE: The password is case sensitive)*

**STEP 12 -** Double click the **Fusion Icon** on your desktop.
**STEP 13 -** Plug the display into the computer using the USB cable.
**STEP 14 -** *If asked, choose* **"Yes, this time only"***, then click* **Next***.*
**STEP 15 -** *Select* **Install the software automatically** *then* **Next***.*
**STEP 16 -** If you're asked to "Continue Anyway" or "STOP installation" click **Continue Anyway** then click **Next** to complete the hardware wizard.

## Using the Fusion Update Software

*A computer with internet access is required:*

**STEP 1 -** Double click the **Fusion Icon** on your desktop.

**STEP 2 -** When asked, plug the display into the computer using the supplied USB cable.

**STEP 3a -** If an update is available, click **YES** to continue.

***DO NOT unplug the display from the computer during an update.***

**STEP 3b -** If an update is not available, click the **OK** button.

**STEP 4 -** Once the update is complete, click **Close.**

## Cable Installation

**STEP 1 -** Locate the On Board Diagnostics II (OBDII) port. *(This connector is typically found directly below the driver side dash console.)*

**STEP 2 -** Plug the OBDII connector into the vehicle port.

**STEP 3 -** Route the HDMI end up the driver side dash. *(On most vehicles, the side panel may be removed to expose the underside of the dash for easier routing. Leave exposed until after the display is installed.)*

## Windshield Mount Installation

**STEP 1 -** Use the Alcohol Wipe to liberally clean the windshield in the area you plan to place the suction cup. Allow the glass to fully dry.

**STEP 2 -** Firmly press and hold the suction mount against the glass.

**STEP 3 -** Rotate the Cam Lever towards the glass to create the suction.

## Installing the Display

**STEP 1 -** Plug the HDMI connector into the HDMI receptacle located on the back side of the display.

**STEP 2 -** Align the Dual Tabs on the Mount with the mount receiver on the back side of the display, then slide it into place.

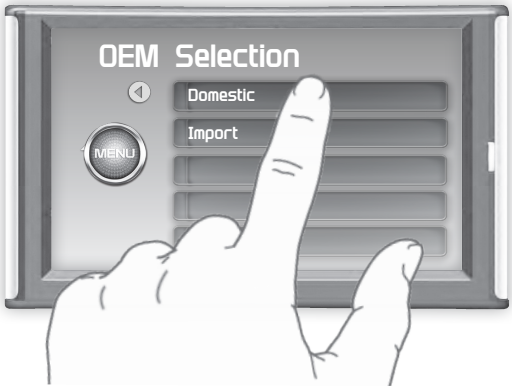
**STEP 3 -** Adjust the viewing angle using the adjustment nut on the mount's swivel head.

**STEP 4 -** Pull any extra cable back behind the pillar and dash. (Re-install any panels removed during the Cable Installation.)

# Display Set Up

## OEM Selection Menu

Once the installation is complete, and you first plug the device into the OBDII port, the OEM selection menu will appear.



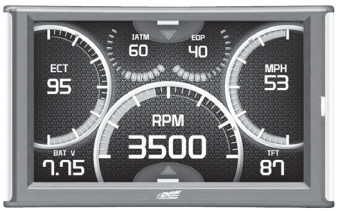

**STEP 1 -** Turn the vehicle to the ON or RUN key position.

**STEP 2 -** Select one of the three options available:

**Domestic**
Ford || Chrysler/Dodge || GM/Chevy || Other

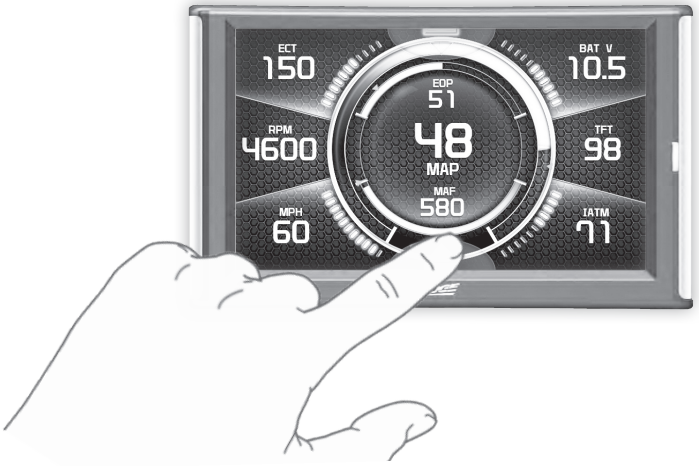
**Import**
BMW || Mazda || Mini Cooper || Mitsubishi || Nissan || Subaru || Other

**STEP 3 -** Follow the on screen instructions. The Main Gauge screen will appear.

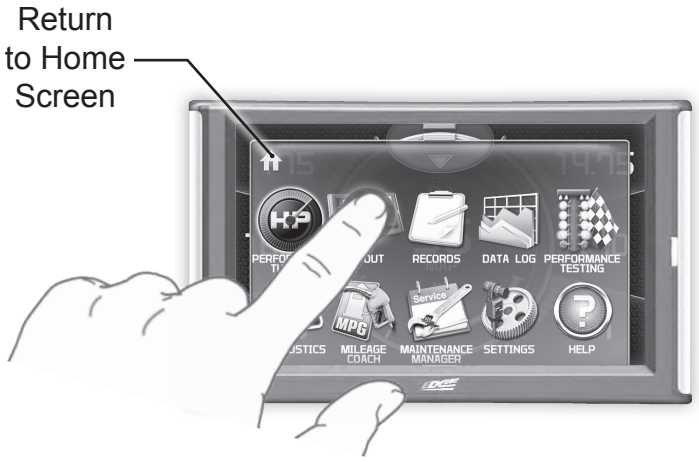


## Entering the Quick Link Menu

**STEP 1 -** Press the lower menu tab to enter the Quick Link Menu.

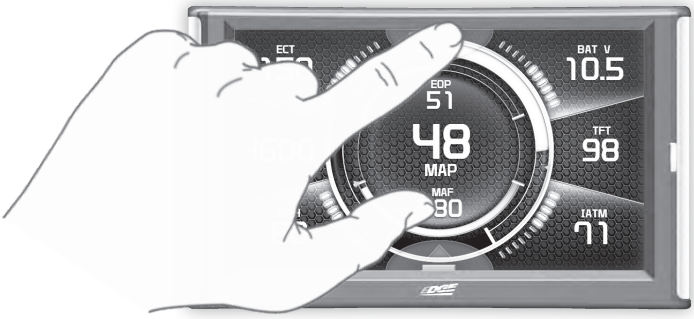



**STEP 2 -** The Main Menu will appear. Choose a menu option, and Press the Icon to enter that feature menu. (Note: Each feature menu option is shown in detail later in this manual)



## Entering the Pull Down Menu

**STEP 1 -** Press the upper menu tab to enter the Pull Down Menu.



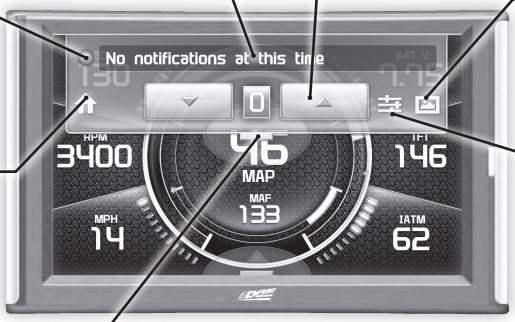

The following screen will appear:

If notifications are active they will be listed here. If multiple notifications are active at one time they will alternate every few seconds.

These buttons toggle the power level which is displayed between the two.

Change Background Image

Light Indicator




Return to Home Screen

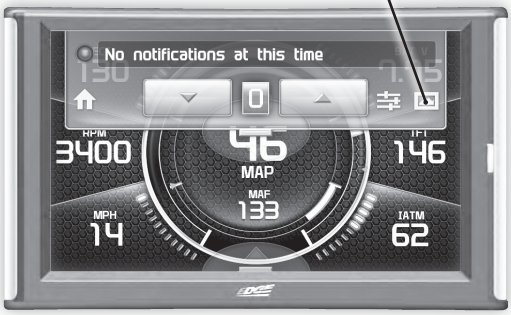
Adjust Background Color & Opacity

When the Drop Down menu is closed, this tab alerts you to any notifications that are available by changing color.

## Changing the Default Background Image

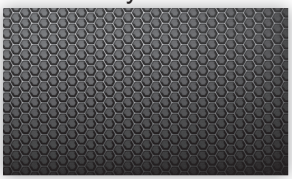
**STEP 1 -** Enter the Pull Down Menu.

**STEP 2 -** Press the Background icon.



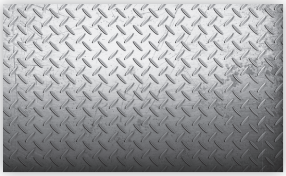

Each press of the icon will cycle through to the next image:

Honey Comb



Wild Fire

Diamond Plate

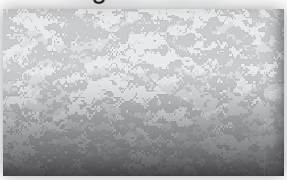


(Red/Blue/Green) Flash

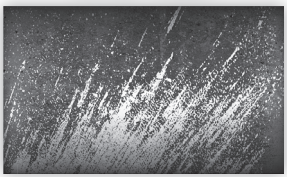
Scratched

Simple

Digital Camo



White Wash

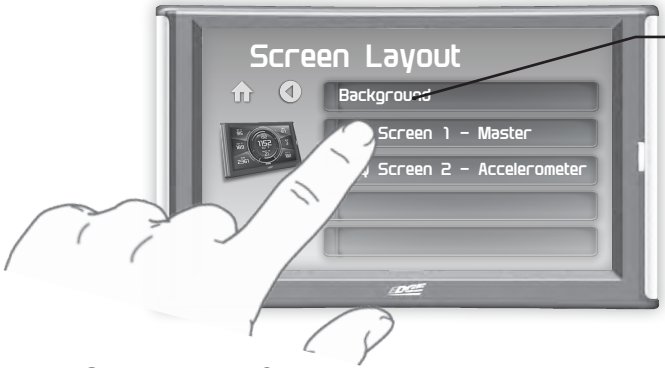


*Refer to the "Adding Custom Background Images" section of this manual for information on how to add your own images to the display.*

## Configuring the Home Screens

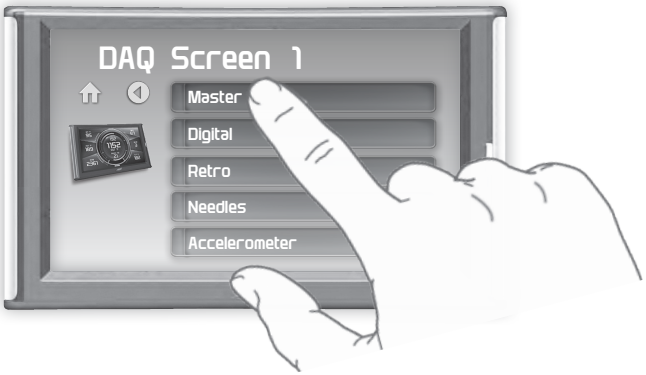
**STEP 1 -** Enter the Quick Link menu. (see page 15)
**STEP 2 -** Press the Screen Layout Icon

**STEP 3 -** Select the a DAQ screen option




Press to select a default Background image

**STEP 4 -** Select one of the screen layout options

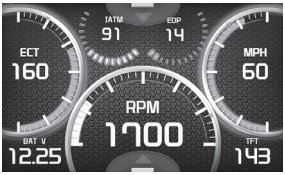


## Layout Options

Master Gauge

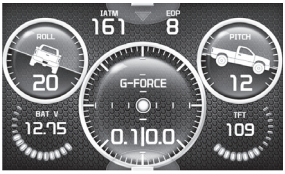
Digital Gauges

Retro Gauge



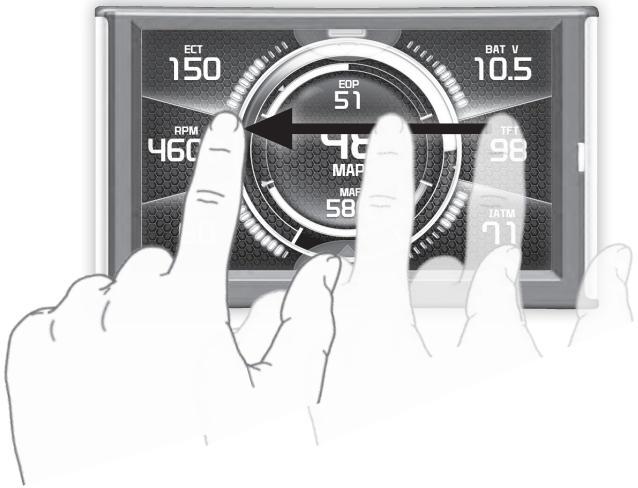

Needle Gauges

Accelerometer Gauges



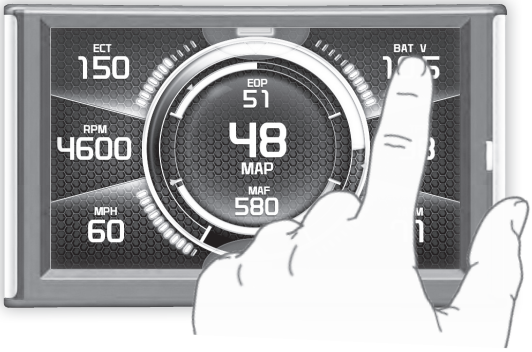

**STEP 5 -** Return to the Home screen.

**STEP 6 -** Swipe horizontally to switch between your selected layouts.



## Individual Gauge Setup

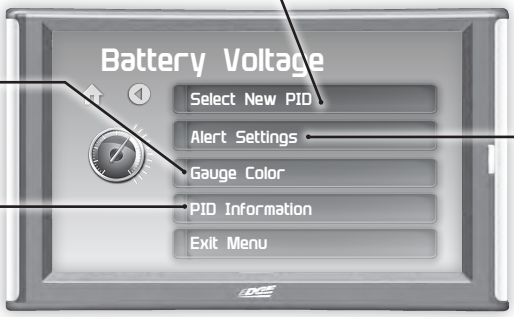
**STEP 1 -** Press any gauge.




**STEP 2 -** Select New PID

Some Analog gauges allow you to change its color

Describes the selected PID




Please Refer to Alert Options Section for more info

**STEP 3 -** Press the Up/Down arrows to locate a new PID. Select a new PID.

**STEP 4 -** Return Home. The new PID will be displayed on the gauge you selected..

## Calibrating Pitch, Roll, & G-Force Gauges

Once the display has been installed, and is mounted in a semi-permanent position, the Pitch, Roll, & G-Force gauges will need to be calibrated.

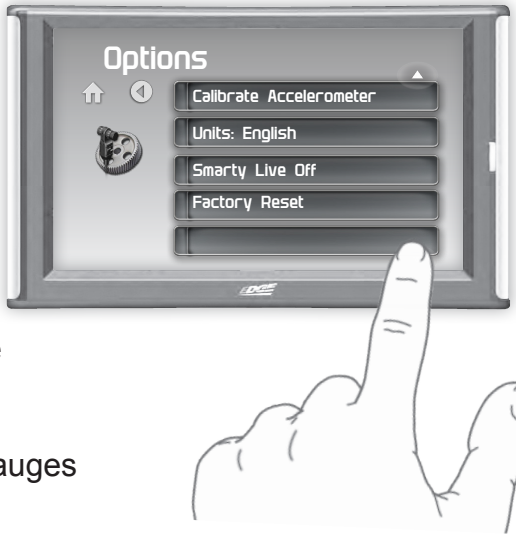
**STEP 1 -** Refer to Configuring the Home Screen section in this manual. Assign the Accelerometer screen layout to one of the DAQ screens.

**STEP 2 -** Once the Accelerometer Gauge is displayed, enter the Quick Link menu. (see page 15)

**STEP 3 -** Press the Settings icon.

**STEP 4 -** Press the Up/ Down arrows until the Calibrate Accelerometer option is available.

**STEP 5 -** Press the Calibrate Accelerometer option.



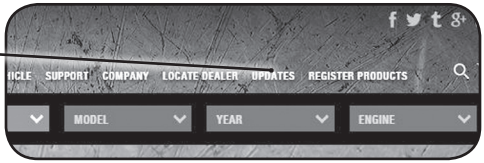

**STEP 6 -** Return home to the gauge screen.

The Pitch, Roll, & G-Force gauges should all read zero.

## Download and Install MyStyle Software

MyStyle is software that allows you to customize your display background image and manage your EAS devices.

**STEP 2 -** Click the **UPDATES** tab, then Mystyle **DOWNLOAD**.




**STEP 3 -** Open the **MyStyleSetup.exe** file, then click **Run**.

**STEP 4 -** Click **Next** to begin.

**STEP 5 -** Choose a folder location, then click **Next** to continue.

**STEP 6 -** Click **Next** to confirm the installation.

The publisher could not be verified. Are you sure you want to run this software?
Name: ...sers\rgollaher\Downloads\MyStyleSetup (5).exe
Publisher: Unknown Publisher
Type: Application
From: C:\Users\rgollaher\Downloads\MyStyleSetup (5)....
Run
Cancel
Always ask before opening this file
This file does not have a valid digital signature that verifies its publisher. You should only run software from publishers you trust.
How can I decide what software to run?

**STEP 7 -** Click the **OK** button if during the installation, the following message appears:

*"These drivers are not Windows Logo or WHQL verified. If you are asked, please choose to install them anyway."*

**STEP 8 -** Click **Close** to exit once the installation is complete.

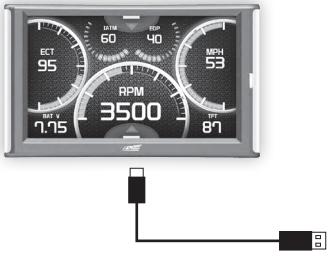
## Adding Custom Background Images

This section describes how to add personalized photos or pictures to your display using a computer.

**STEP 1 -** Double-click the MyStyle

icon on your desktop.

**STEP 2 -** Connect the display using the supplied USB cable.
*When a display is plugged in, an image of the display will appear with a 9 digit number.*




**STEP 3 -** Click the image of your display.

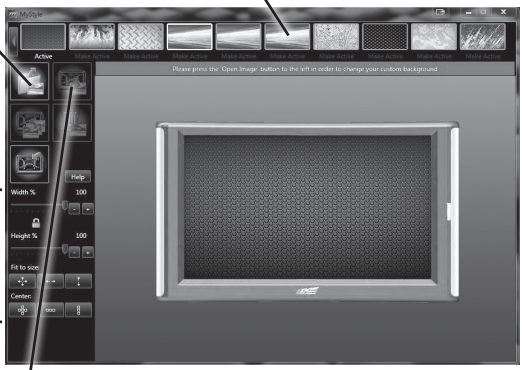
**STEP 4 -** Choose to Customize the Display.

**STEP 5 -** Select an Image to replace.

**STEP 6 -** Select the Open Image button.

**STEP 7 -** Use the available tools to size and align your image.

**STEP 8 -** Click the Save Background button to save your progress. This will also save the new background image to you display.



# Settings

## Accessory Options

**STEP 1 -** Enter the Quick Link menu. (see page 15)
**STEP 2 -** Press the Settings icon.

**STEP 3 -** Press the Accessory Options button.

**STEP 4 -** Select an option in which you would like to modify.

**⚠ WARNING:**

Do not rely solely on the camera image for backing up. It is possible for the camera image to freeze.

**STEP 5 -** Select Camera Delay. Adjust the value using the arrows, then press Enter.

The CTS2 is designed to display the back-up camera when the vehicle is put into reverse. This feature allows you to specify how many seconds you would like the camera view to wait before it shows up on the display.

*NOTE: This feature is not available on all vehicle makes and models.*

**STEP 6 -** Select Camera At Startup.
Turning the Camera At Startup feature ON allows the back-up camera image to automatically come on during the startup of the display.

**STEP 7 -** Select Turbo Cool Down Setup. *(NOTE: This feature is only available if an EAS Turbo Timer display has been installed.)*

This feature allows the engine to continue running (after the key is in the-off position) until one of four conditions have been met:

1. If the EGT value falls below the target set point.
2. The time set expires
3. Pressing either the brake or gas pedal.
4. Touching the display.

Select this option if you would like the turbo timer feature to use a pre-determined EGT value.

Select this option if you would like the turbo timer feature to use a pre-determined time setting (seconds).

This option will disable the turbo timer feature and take you back to the previous menu.

⚠ WARNING: Do not use this feature in an enclosed area.

*NOTE: 2007-09 Dodge trucks can be turned off using the key's panic button. 2010 Dodge trucks can be turned off if the lock and panic buttons are pressed at the same time.*

# Vehicle Options - Tire Size

*The display is capable of re-calibrating the vehicle's speedometer and the MPH PID. In order for this to happen, you will need to enter a tire size.*

**STEP 1 -** Enter the Quick Link menu. (see page 15)

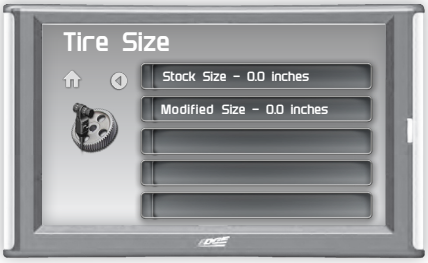
**STEP 2 -** Press the Settings icon.

**STEP 3 -** Select Vehicle Options, then select Tire Size.

**STEP 4 -** Select the size option that best fits your application:

Stock Size = Stock Tires

Modified Size = Non-Stock Tires




**STEP 5 -** Choose the tire format that best fits your application, and insert the information.

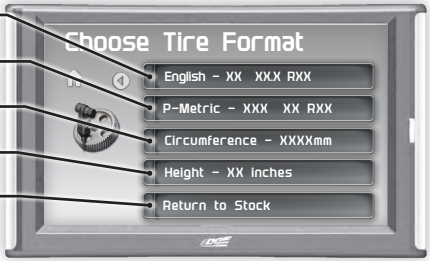
**English** = height(XX) / width(XX.X / wheel size (RXX)

**P-Metric** = width(XXX) / aspect ratio(XX) / diameter (RXX)

**Circumference** = the outer circumference of the tire (mm)

**Height** = The height of the tire (from ground to top of tire)

**Return to Stock** = Erases any tire info you have entered, and returns the tire size to the original default setting.




**STEP 6 -** Choose the tire format that best fits your application, and insert the information as shown below.

OR

## Alert Options

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Settings icon.

**STEP 3 -** Select Alert Options from the list.

**STEP 4 -** Select a PID from the list.

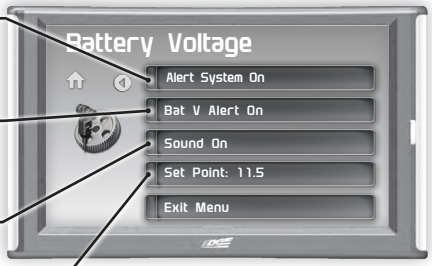
Press to toggle the Alerts Off or On

**STEP 5 -** Make your adjustments. In the example below, battery voltage is being modified.

Turn On or Off the alert system for all PIDs.

Turn On or Off this specific PID's alerts.

Turn On or Off the alert sound for this PID only.




This is the point at which you want the alert to be triggered for this PID.
*The example above shows 11.5 as the value. If the display detects a battery voltage of 11.5 volts or less, the alert will be triggered.*

**During an alert:**

1)The alert will be displayed

2)This will light up in red

3)The tab will flash red

4) The gauge will flash red

## Sound Duration - Alerts

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Settings icon.

**STEP 3 -** Select Sound Duration from the list.

**STEP 4 -** Adjust the time (in seconds) to the length of time an alert should sound.

**STEP 5 -** Press Enter

## Backlight Auto dim

Each display is equipped with a light sensor that detects how much light is entering the vehicle cab. During the day, the display will be at it's maximum brightness. As it gets darker outside, the display will automatically dim according to the amount of sunlight. If the value is kept at 99%, the display will be as dim as possible. If the value is set to 50%, the display will only be half as dim at night.

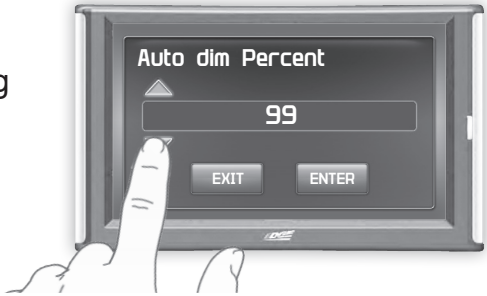
**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Settings icon.

**STEP 3 -** Scroll through the list and select Backlight Auto dim.

**STEP 4 -** Adjust the percent value for how much dimming will take place at night.

**STEP 5 -** Press Enter.



## Menu Time out

This feature prevents the display from staying on for excess amounts of time. Once the time runs out, the display will return to the main gauge screen, then shut off.

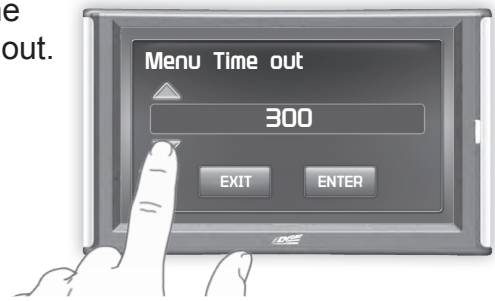
**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Settings icon.

**STEP 3 -** Scroll through the list and select Menu Time out.

**STEP 4 -** Adjust the time value (in seconds).

**STEP 5 -** Press Enter.




## Units

Changing the unit option allows you to view PIDs in either Metric or English. Vehicle Speed, for example, may be viewed as either MPH or KPH. Temperature PIDs such as Engine Coolant Temperature may be viewed as either Fahrenheit or Celsius, etc.

***CAUTION: If you set up your display while the units are in English, and then switch to Metric, the values will remain the same, and not be converted.***

## Factory Reset

This feature will return the display to the factory default settings. All records and input data will be deleted and not recoverable.

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Settings icon.

**STEP 3 -** Scroll through the list and select Factory Reset.

**STEP 4 -** Press YES

# Performance Tuning

## Basic Vehicle Programming

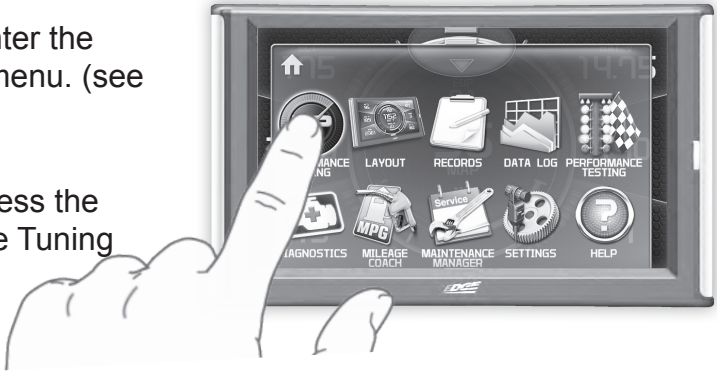
The Evolution comes ready with power levels that can be used to easily program the vehicle's Power Control Module (PCM). This section explains how to tune a vehicle using the standard level options.

***CAUTION: Programming requires that the vehicle be parked and not moving. As such, make sure to park away from traffic or areas where the vehicle may impede access or exit. Programming will take several minutes and the vehicle can't be started during this process.***

**STEP 1 -** Unplug all power consuming devices plugged into the cigarette lighter or other power ports. *(NOTE: Some vehicles require that the radio fuse be removed prior to programming.)*

**STEP 2 -** Enter the Quick Link menu. (see page 15)

**STEP 3 -** Press the Performance Tuning icon.




**STEP 4 -** Select one of the available tuning levels.

***⚠WARNING: Do Not combine or "Stack" chips (modules) to gain more horsepower. The chips could be incompatible and result in power-train failure or create dangerous conditions leading to a serious or fatal accident.***

**STEP 5 -** Press Yes to continue.

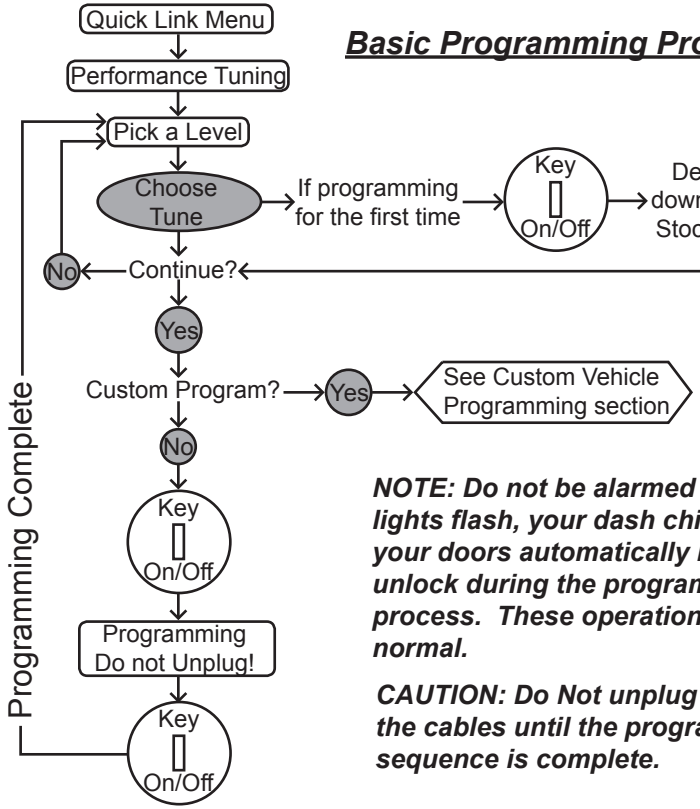
**STEP 6 -** When asked if you would like to create a custom program, press NO.

*NOTE: After selecting NO, the Evolution will begin to save the stock files. These files are used to return your vehicle back to it's stock settings.*

**STEP 7 -** When asked, follow the Key-ON / Key-OFF instructions.

*(NOTE: After the programming is complete, you will be taken back to the Levels screen. At the top it will say: "Current Lvl - the tune you picked")*

## Basic Programming Process




***NOTE: Do not be alarmed if your lights flash, your dash chimes, or your doors automatically lock and unlock during the programming process. These operations are normal.***

***CAUTION: Do Not unplug any of the cables until the programming sequence is complete.***

## Custom Vehicle Programming

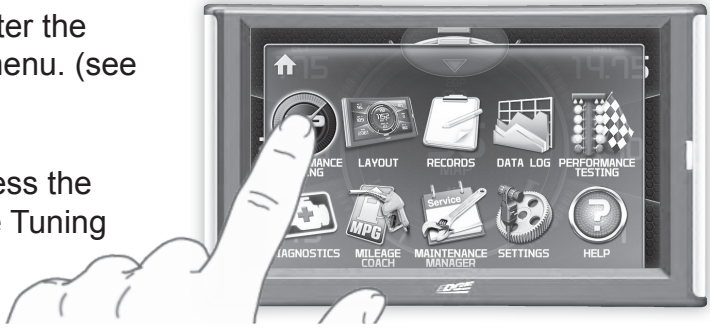
The Evolution comes ready with power levels that can be used to easily program the vehicle's Power Control Module (PCM). This section explains how to modify custom options within each power level.

***CAUTION: Programming requires that the vehicle be parked and not moving. As such, make sure to park away from traffic or areas where the vehicle may impede access or exit. Programming will take several minutes and the vehicle can't be started during this process.***

**STEP 1 -** Unplug all power consuming devices plugged into the cigarette lighter or other power ports. *(NOTE: Some vehicles require that the radio fuse be removed prior to programming.)*

**STEP 2 -** Enter the Quick Link menu. (see page 15)

**STEP 3 -** Press the Performance Tuning icon.




**STEP 4 -** Select one of the available tuning levels.

***⚠WARNING: Do Not combine or "Stack" chips (modules) to gain more horsepower. The chips could be incompatible and result in power-train failure or create dangerous conditions leading to a serious or fatal accident.***

**STEP 5 -** Press Yes to continue.

**STEP 6 -** When asked if you would like to create a custom program, press Yes.

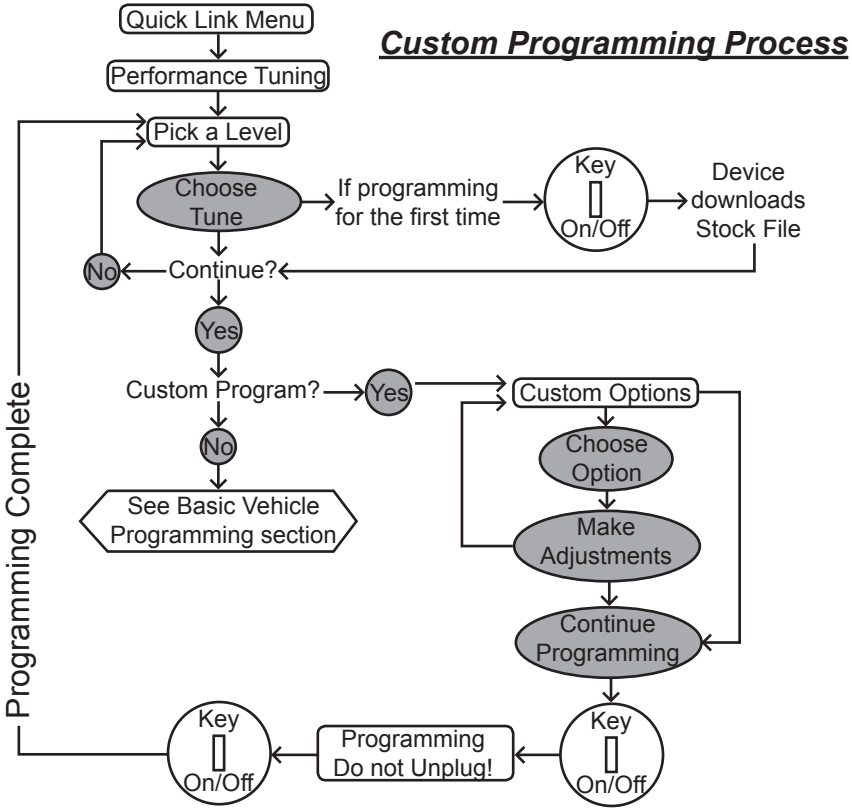
**STEP 7 -** Scroll through the available options, modify them accordingly, then press Enter.

**STEP 8 -** Select Continue Programming.

**STEP 9 -** When asked, follow the Key-ON / Key-OFF instructions.

*(NOTE: After the programming is complete, you will be taken back to the Levels screen. At the top it will say: "Current Lvl - the tune you picked")Levels screen. At the top it will say: "Current Lvl - the tune you picked")*

## ***Custom Programming Process***



## Power Levels Explained

*NOTE: Not all level shown below are available on every vehicle make and/or model.*

The Evolution device typically comes ready with (4) power levels. These levels are tuned specifically for different driving situations. This section describes each level and how it should be used.

***⚠WARNING: Performance and Extreme levels are not intended for and should not be used for towing. Do not exceed your vehicle's max Gross Vehicle Weight Rating (GVWR) as outlined in the vehicle's owner's manual. Doing so may result in loss of vehicle control and cause bodily injury.***

**TRANS ONLY** - The trans only level affects and makes changes to the transmission only. It will provide firmer transmission shifts which may help increase transmission life.

**ECONOMY** - The economy level is the lowest power level. It has been specifically tuned for optimum fuel economy. We recommend using this level for daily driving.

**TOWING** - The towing level is designed for towing. The tuning created for this level provides power when it is needed most while pulling a load.

**PERFORMANCE** - The performance level is a high power level. The fuel injection and timing is adjusted to semi-aggressively extract power gains from the vehicle without sacrificing drive-ability or durability.

**EXTREME** - This is the highest setting for an Evolution. The fuel injection and timing is adjusted to aggressively extract high performance from your vehicle without sacrificing driveability or durability.

## Custom Options Explained

After choosing a power level you will be given the option to adjust a custom option. This means that within each programming level you can adjust specific vehicle functions.

**USE CURRENT SETTINGS** - This option will use the previously selected/modified options.

**RESET ALL VALUES** - This options will restore all of the settings back to the factory default settings.

**TIRE SIZE** - This options will allow you to select a new tire size if you've changed the factory tires.

**GEAR RATIO** - This option will allow you to select a new gear ratio if you've changed the factory gears.

**SPEED LIMITER** - This option will allow you to adjust the factory speed limiter higher or lower.

***⚠WARNING: Removal/adjustment of the factory speed limiter is intended for use at a closed circuit, legally sanctioned racing environment. If you drive on public roads after removal or adjustment of the speed limiter, you must still obey all driving laws, including adhering to posted speed limits. To drive at racing speeds on public roads seriously endangers you, your passengers, and others nearby. Also it is your responsibility to ensure your tires and other vehicle components are rated to travel at increased speeds. Driving at high speeds with inadequate tires or other components can lead to serious or fatal injury.***

***Caution: Removing/adjusting the speed limiter for purposes inconsistent with the products's intended function violates the product's intended use and will invalidate the product's warranty. Edge Products is not responsible for, or liable for the consequences of improper product use.***

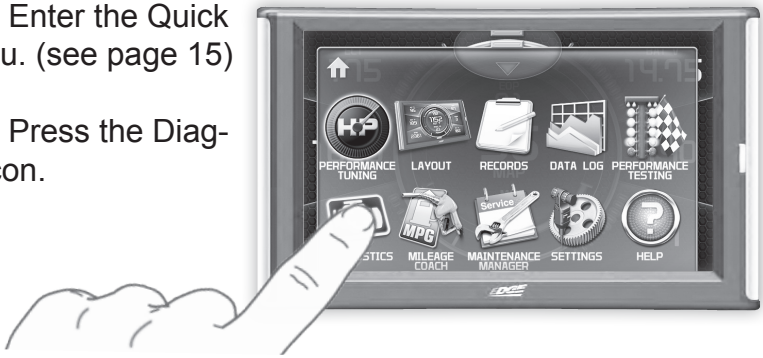
# Diagnostics

## Read DTCs

When your PCM detects a problem with your vehicle it sets a trouble code, and most times a “Check Engine” light on your dash is activated. These codes can be retrieved and used to help diagnose specific issues.

**STEP 1 -** Enter the Quick Link menu. (see page 15)

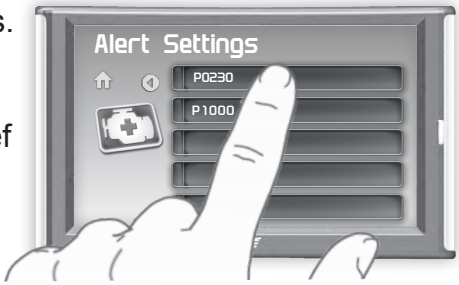
**STEP 2 -** Press the Diagnostics icon.




**STEP 3 -** Select Trouble Codes.

**STEP 4 -** Select Read DTCs.

**STEP 5 -** If a code is listed, select the code to see a brief explanation of the issue.




*If a code is shown, write down the information given. You can use this code number to research the particular issue. The internet is a good resource for looking up most codes.*

## Clear DTCs

This feature allows you to clear most DTCs. This will erase any codes currently set. If the codes come back we recommend you see a qualified mechanic who can accurately diagnose and repair the problem.

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Diagnostics icon.

**STEP 3 -** Select Trouble Codes.

**STEP 4 -** Select Clear DTCs.

## Clear On Start

**This feature is not available on all products.**
In some instances, DTCs may need to be cleared every time the truck starts or the truck will go into “limp” mode.

***NOTE: Fords and Chevy’s are able to clear codes while the truck is running. Dodge Trucks however may require you to clear only when the key is on and the engine is not running.***

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Diagnostics icon.

**STEP 3 -** Select Trouble Codes.

**STEP 4 -** Select Clear On Start to toggle between Yes and No.

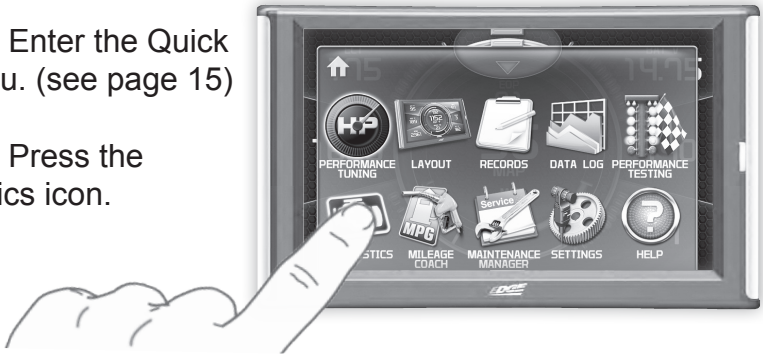
# Manual DPF Regeneration

**Available only on specific Diesel Trucks Only**

Manual regeneration allows you to manually clear out the Diesel Particulate Filter (DPF). Completing a manual regeneration cycle will clear the soot mass in the filter, and lower exhaust back pressure to improve exhaust flow.

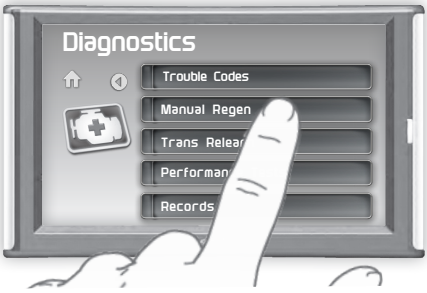
**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Diagnostics icon.




**STEP 3 -** Select the Manual Regen option.

**STEP 4 -** When prompted, touch the screen to continue.




*NOTE: When manually initiating a regeneration cycle, some vehicles will require a drive cycle (i.e. you have to drive the vehicle some distance) while others may allow you to initiate a Service Regeneration where you can leave the vehicle parked and the engine running. If the latter is the case, be sure to use the following guidelines.*

*1. Park the vehicle outdoors and keep people, other vehicles, and combustible materials away from it.*

*2. Do not leave the vehicle unattended.*

*3. Do not connect any shop exhaust hoses or vents to the tail pipe.*

# DPF Regeneration Explained

***CAUTION: Exhaust temperatures may be greater than 300C (572 F) during service regeneration.***

***CAUTION: Due to the elevated temperatures during this procedure, open the hood and keep the front of the vehicle away from anything impeding air flow to the radiator.***

***DPF REGENERATION***

*If you own a newer diesel powered vehicle, your vehicle is equipped with a diesel particulate filter (DPF). This filter is used in conjunction with a diesel oxidation catalyst. Together they work to reduce the amount of soot and emissions emitted from the tailpipe. As soot builds up in the DPF it will begin restricting flow. The soot that gathers is automatically purged in one of two ways: Passive Regeneration & Active Regeneration. Both methods occur automatically and require no action on your part. During either of these regeneration methods, you may notice an increase or change in the exhaust noise & increased Exhaust Gas Temperature (EGT).*

***PASSIVE REGENERATION***

*Passive regeneration occurs when the exhaust gas temperature (EGT) reaches an appropriate level in order to oxidize or burn soot to clean the DPF. This method can happen as a result of normal engine operating conditions, typically when the engine reaches an (EGT) high enough to burn off the soot (i.e. heavy towing, high load conditions, etc). If EGTs do not get hot enough to cause passive regeneration, your truck's engine-control system automatically initiates an active regeneration.*

***ACTIVE REGENERATION***

*During active regeneration, the truck computer cleans the DPF by raising the exhaust temp to a point where the soot is burned away. This is accomplished through various engine actions which raise the EGTs in the oxidation catalyst/DPF system to a level where the soot is burned off. After the soot is burned off, the EGTs and back pressure (restriction) fall back to normal levels. In order to help you know the status of DPF Regeneration, the device will show in the alerts section of the drop down menu anytime active regeneration is happening.*

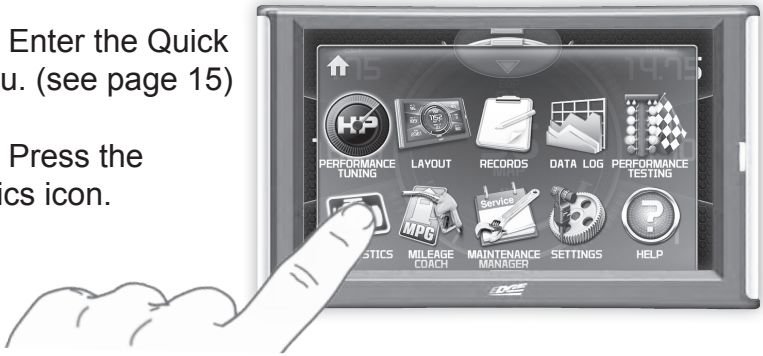
# Injector Balance Rates

### Available only on specific GM/Chevy Trucks Only

Injector Balance Rates are used to determine if all injectors are operating within the correct tolerances. If you are experiencing a misfire, knock, excessive smoke, or rough running conditions with no DTCs, this option can help identify faulty injectors. The balance rates are the fuel adjustments for each individual cylinder based on the variations in engine crankshaft speed. These will change depending on if the transmission is in Neutral or Drive. Injectors that read outside of the +/- 4.0 in park/neutral or +/- 6.0 in drive may be faulty.

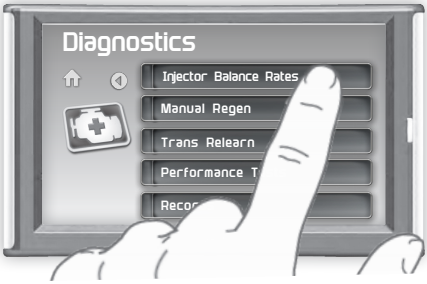
**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Diagnostics icon.



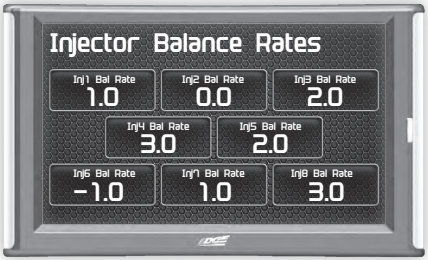

**STEP 3 -** Select the Injector Balance Rates option.

**STEP 4 -** When prompted, touch the screen to continue.



**STEP 5 -** What each injector value while in Park/Neutral, and then while in Drive.

**STEP 6 -** Touch any gauge to return home.




If you suspect a faulty injector, we recommend consulting a professional diesel mechanic who can verify the issue and also perform a cylinder power balance test to further diagnose.

## Transmission Relearn

***For 2001-2013 GM diesel trucks only***

The vehicles listed above are equipped with transmissions that "learn" while you drive. Sometimes when these vehicles are programmed with an aggressive tune, the transmissions act differently. This feature forces the transmission to relearn and accommodate the new tune.

**STEP 1 -** Enter the Quick Link menu. (See page 15)

**STEP 2 -** Press the Diagnostics Icon.

**STEP 3 -** Scroll through the list and select Trans Relearn.

**STEP 4 -** When asked, select Yes to continue.

**STEP 5 -** Drive the vehicle as you normally would. The transmission will relearn as you drive.

*NOTE: After the relearn commands are sent there might be some clunks, bumps, and/or short flares, especially during the 3-4 shift (3rd gear to 4th gear). This is normal. Completion of this feature will require a minimum of 3 upshifts at a steady throttle angle.*

# Performance Testing

## 0-60 & Quarter Mile

Performance tests can be helpful for measuring performance gains after vehicle modifications have been made. The results recorded during these test will likely differ from what you'll see on a drag-strip or other racing venues. Incorrect speedometer calibration, data sample rate, and tire slippage can cause miscalculations in the displayed results.

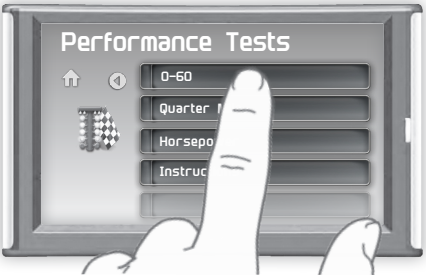
**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Performance Testing icon.

**STEP 3 -** Select either the 0-60 or Quarter Mile option.

**STEP 4 -** Bring the vehicle to a complete stop.

**STEP 5 -** Use the drag strip style light tree on the left of the screen to know when to begin accelerating. Once you have reached 60 mph (or a quarter mile), the test will show as completed.



**STEP 6 -** Touch the screen to exit the test.

***WARNING: Do not use the Performance Tests feature to break any traffic laws.***

## Horsepower

*NOTE: Before using the Horsepower test, the vehicle weight (aka curb weight) must be entered first. The curb weight is the total weight of a vehicle with standard equipment, all necessary operating consumables (e.g., motor oil, coolant), a full tank of fuel, with no passengers or cargo.*

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Settings icon.

**STEP 3 -** Scroll through the menu, then select the Vehicle Weight option.

**STEP 4 -** Use the UP & DOWN arrows to enter the weight.

**STEP 5 -** Return Home and re-enter the Quick Link menu.

**STEP 6** - Select the Performance Testing icon.

**STEP 7 -** Select the Horsepower option.

**STEP 8 -** Bring the vehicle to a complete stop.

**STEP 9 -** Use the drag strip style light tree on the left of the screen to know when to begin accelerating. *Touch the screen to exit the test.*

# Data Log

## Data Logging Explained

The data logging feature allows you to record all of the available PID data on your display. This information can be retrieved and viewed using the MyStyle software package.

***NOTE: The display also runs background tasks which are also recorded. This information can be ignored.***

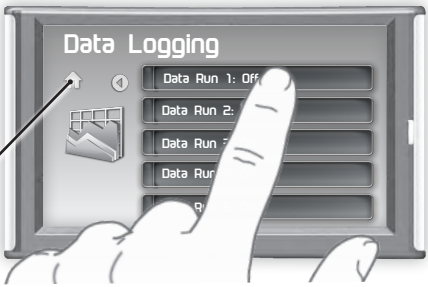
**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Data Log icon.

**STEP 3 -** Select one of the (5) Data Run options. This will turn the run On or Off.

***NOTE: Only one run can be turned on at a time.***

**STEP 4 -** Select the Home button to return to the main gauge screen. The display is now in recording mode.




**STEP 5 -** Once you have recorded for a desired period of time, return to the Data Logging menu and turn Off the run.

***NOTE: The maximum amount of Data Logging time depends on how many items you are logging at once. This may be anywhere from 15 to 20 minutes total. Once the limit is reached, the Data Logging feature will be automatically shut off.***

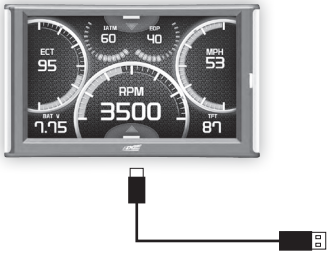
***NOTE: If you turn the same Data Run back On, the previous data will be erased and a new recording session will begin. If the indicator light is red, there is currently a recorded file associated with that run.***

## Retrieving Data Using MyStyle

This section describes how to retrieve the data recorded during a Data Logging recording session. If you have not yet installed MyStyle refer to the Display Set Up section of this manual.

**STEP 1 -** Double-click the MyStyle icon on your desktop.

**STEP 2 -** Connect the display using the supplied USB cable.
*When a display is plugged in, an image of the display will appear with a 9 digit number.*

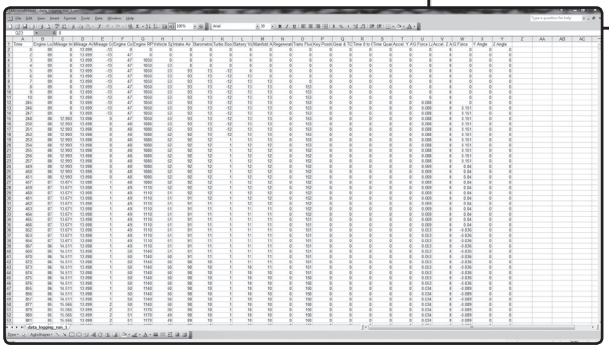



**STEP 3 -** Click the image of your display.

**STEP 4 -** Select Data Logs.

**STEP 5 -** Click the Save File As button and save the file.

**STEP 6 -** Locate the saved file on your computer and open it. The file will be saved as a .CSV file and can be opened using Microsoft Excel or similar.



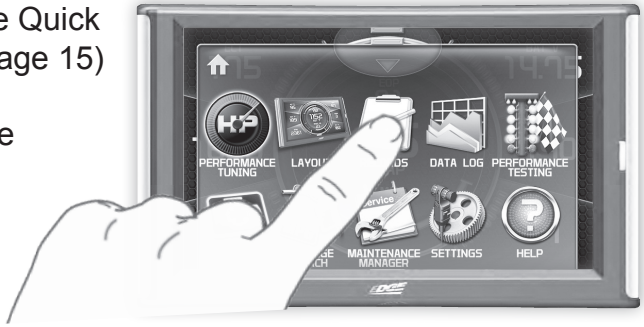
# Records

## Records Explained

Records contain certain parameters for later review. This is useful after completing a performance test on the drag strip, at a sled pull, or when you are trying to trouble shoot a particular issue.

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Records icon.




**STEP 3 -** Scroll through the list to view all records.

**STEP 4 -** Press, hold, and release any individual record to reset it to default. All other records will remain as is.

**STEP 6 -** Press, hold, and release the Clear All option to reset all values to zero.

# Help

## Help Menu Explained

The Help Menu contains useful information about your display, and the vehicle it is currently plugged into. It also contains Edge Products contact information and Technical Support tools.

**STEP 1 -** Enter the Quick Link menu. (see page 15)

**STEP 2 -** Press the Help icon.

**STEP 3 -** Select the option that best describes your need:

### Product Info (Display)

- Version
- Application Version
- Calibration Version
- Firmware (BC) Version
- FPGA Version
- MSP430 Version
- Serial Number (used to identify your display in the software update process and during Technical Support calls)

### Product Info (EAS)

If you have an EAS device installed on your vehicle and plugged into your display, another Product Info screen will be available. It will list your EAS device's Firmware Version as well as its serial number.

### Vehicle Info

Displays important information about your vehicle that is used by technical support to trouble shoot issues.

### Contact Info

Shows our website, company address, the technical support email address, and the technical support phone number.

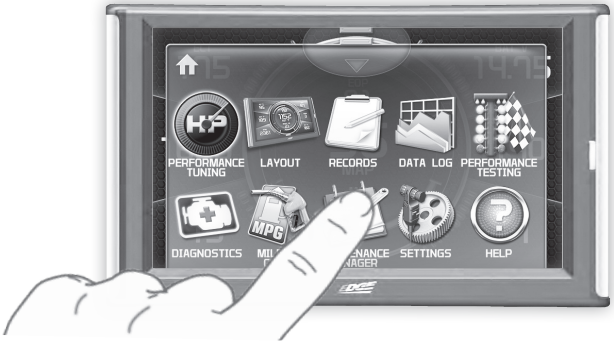
### Tech Support Tools

This menu should only be used when requested by Edge Products Technical Support personnel.

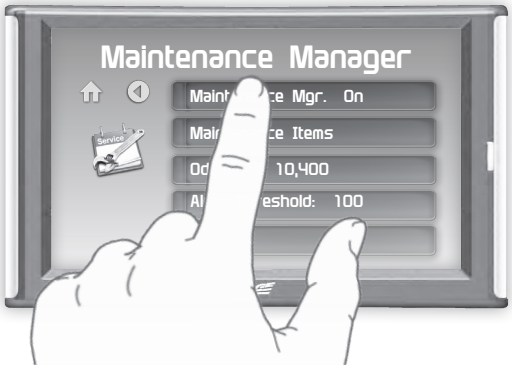
# Maintenance Manager

## Turn on Maintenance Manager

**STEP 1 -** Enter the Quick Link menu. (see page 15)
**STEP 2 -** Press the Maintenance Manager Icon.




**STEP 3 -** Select the Maintenance Mgr button to turn the feature on. *(This button toggles the feature off and on.)*



## Entering the Odometer Value

**STEP 1 -** While in the Maintenance Manager menu, Press the Odometer button.

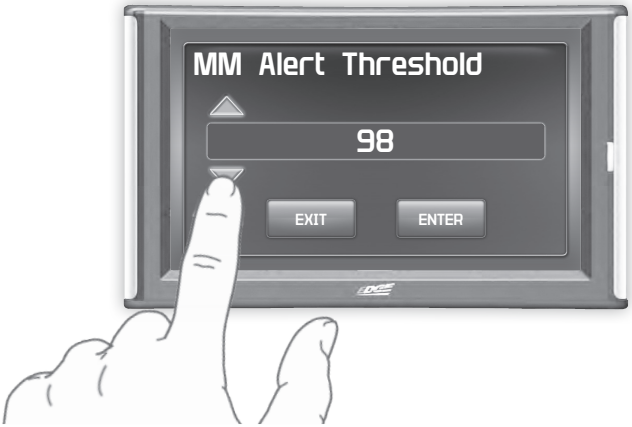
**STEP 2 -** Enter the current Odometer reading from your vehicle, then press Enter.

## Setting the Alert Threshold

**STEP 1 -** While in the Maintenance Manager menu, Press the Alert Threshold button.

*NOTE: The alert threshold is the number of miles you would like to be alerted before a specific maintenance item is due. In the example above, you would be alerted 100 miles before the actual mileage it is due.*

**STEP 2 -** Press the arrows to adjust the value. Then press Enter.



## Customizing Maintenance Items

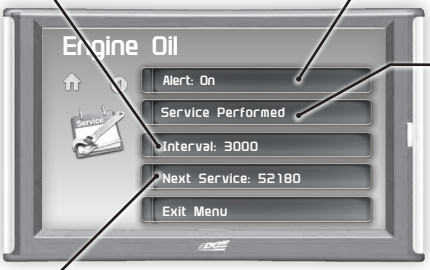
Once the odometer has been updated, you may begin to modify each of the specific maintenance items.

**STEP 1 -** While in the Maintenance Manager menu, Press the Maintenance Items button.

**STEP 2 -** Scroll through and select an item from the list.

Enter the interval (in miles) in which you would like the item to alert you. In this example, you will be Alerted every 3000 miles to change your oil.

***NOTE: Refer to your vehicle user manual to determine what interval is recommended for each Maintenance Item.***




Turning On an alert means the item is now being managed

Press the Service Performed button each time the item is serviced. This will reset the mileage for the Next Service.

Based on the Odometer value you previously input, and the Interval value above, the Mileage that will read on the vehicle odometer at the time of required service will be calculated and displayed.

# Mileage Coach

## Mileage Coach Set Up

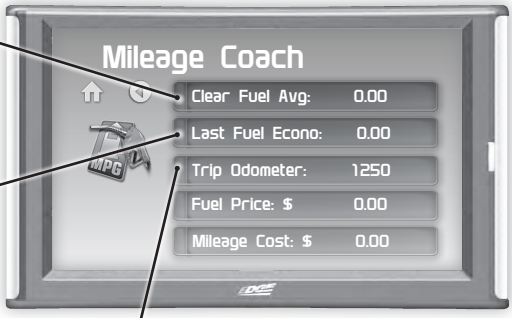
The Mileage Coach feature provides useful tips and tools that help you learn ways to improve your fuel mileage.

**STEP 1 -** Enter the Quick Link menu. (see page 15)
**STEP 2 -** Press the Mileage Coach Icon.

**STEP 3 -** Scroll through the list and adjust each item according to your individual requirement.

The Clear Fuel Average option clears the calculated average displayed in the Mileage Average PID.

The Last Fuel Economy option allows you to enter your actual Fuel Economy value. This value is important and should be calculated and entered regularly. This can be manually calculated by dividing the distance travelled by how much fuel you have used (Distance/Fuel = Fuel Economy). Some vehicles have their own Fuel Economy average that is displayed in cab and may be used instead of a manual calculation.




The Trip Odometer is used to calculate the Trip Cost and Fuel Average.

The Mileage Cost is a calculated average based on how many miles you have traveled and the Fuel Price you entered.

The Trip Cost is calculated from the Fuel Price and the Trip Odometer values.

There are two ways to display the Mileage Coach PID:

**Show Difference**
Displays the difference between Instantaneous and Average fuel mileage.

**Show Values**
Displays as: Instantaneous | Average.

The Fuel Price is used to calculate your Mileage and Trip Costs.

Mileage Driving Tips are intended to give you general information regarding driving habits or anything that will help maximize your fuel economy and overall driving experience.

**STEP 4 -** Refer to the Individual Gauge Set Up section of this manual to display one or all three Mileage Coach PIDs on the main gauge screen.

**Mileage Average** displays the calculated average MPG or L/100km and is updated continuously while driving. The average is calculated only when the PID is being displayed on the main Gauge Screen. This value will typically change more during start/stop driving, and less on the highway.

**Mileage Instantaneous** - shows a conscientious driver how to vary the pressure on the gas pedal to save fuel every second. The value is displayed in either MPG or L/100km.

**Mileage Coach** - takes the Average and Instantaneous values mentioned above and creates a visual tool to help maximize your fuel economy. This PID is best viewed using one of the Analog Gauge locations.

# OEM EGT Locations - Diesel Trucks Only